

IN THE CLAIMS

1. (currently amended) A method of screening for therapeutic agents useful in the treatment of ~~a disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, urological diseases, endocrinological diseases and~~ esophageal cancer, stomach cancer, colon cancer, liver cancer, lung cancer, uterine cancer, ovarian cancer, or kidney cancer in a mammal comprising the steps of

i) contacting a test compound with a GPR14 polypeptide, wherein the GPR14 polypeptide is selected from the group consisting of:

a polypeptide consisting of the amino acid sequence SEQ ID NO:2,

a polypeptide comprising the amino acid sequence SEQ ID NO:2,

a polypeptide which is at least 90% homologous to the amino acid sequence SEQ ID NO:2,

a polypeptide which is at least 95% homologous to the amino acid sequence SEQ ID NO:2,

a polypeptide which is at least 98% homologous to the amino acid sequence SEQ ID NO:2, and

a polypeptide which is at least 99% homologous to the amino acid sequence SEQ ID NO:2;[[,]]

ii) detecting binding of the said test compound to the said GPR14 polypeptide;
and

iii) determining if the test compound has an effect on a symptom of the cancer in an *in vivo* assay.

2. (currently amended) A method of screening for therapeutic agents useful in the treatment of ~~a disease selected from hematological diseases, cardiovascular diseases, disorders of the peripheral and central nervous system, urological diseases, endocrinological diseases and~~ esophageal cancer, stomach cancer, colon cancer, liver cancer, lung cancer, uterine cancer, ovarian cancer, or kidney cancer in a mammal comprising the steps of

i) contacting a cell comprising a GPR14 polypeptide with a test compound, wherein the GPR14 polypeptide is selected from the group consisting of:

a polypeptide consisting of the amino acid sequence SEQ ID NO:2, a polypeptide comprising the amino acid sequence SEQ ID NO:2,

a polypeptide which is at least 90% homologous to the amino acid sequence SEQ ID NO:2,

a polypeptide which is at least 95% homologous to the amino acid sequence SEQ ID NO:2,

a polypeptide which is at least 98% homologous to the amino acid sequence SEQ ID NO:2, and

a polypeptide which is at least 99% homologous to the amino acid sequence SEQ ID NO:2;

ii) ~~to~~ determining ~~an~~ the activity of a GPR14 polypeptide ~~in the presence and at a certain concentration of a test compound or~~ in the absence of ~~the said~~ test compound, wherein the activity is reflected by an observable change in the level in adenylate cyclase activity, guanylylcyclase activity, intracellular calcium concentration, phospholipase C activation, phospholipase D activation, or inositol phospholipid hydrolysis; and

iii) determining if the test compound has an effect on a symptom of the cancer in an *in vivo* assay.

3. (canceled)

4. (previously presented) The method of claim 1, wherein the step of contacting is in or at the surface of a cell.

5. (previously presented) The method of claim 1, wherein the cell is in vitro.

6. (previously presented) The method of claim 1, wherein the step of contacting is in a cell-free system.

7. (previously presented) The method of claim 1, wherein the polypeptide is coupled to a detectable label.

8. (previously presented) The method of claim 1, wherein the compound is coupled to a detectable label.

9. (previously presented) The method of claim 1, wherein the test compound displaces a ligand which is first bound to the polypeptide.

10. (previously presented) The method of claim 1, wherein the polypeptide is attached to a solid support.

11. (previously presented) The method of claim 1, wherein the compound is attached to a solid support.

12-26. (canceled)